# Chapter 11 – Evaluation

Evaluation is referred to as the fifth of the five "E's" in Safe Routes to School, but in actuality, it is inseparable from all of the other E's. It is ongoing and intricately interwoven with all aspects of an SRTS program. Evaluation measures the "value" of what you are doing. It gives focus to your efforts, asking and answering fundamental questions: What are we working on? How is it going? What can we do better? Are we accomplishing our goals? Evaluation happens as you begin your program, as it is implemented, and when you bring it to closure.

## Purpose of Evaluation

Information gleaned from evaluations can be used to shape, improve, and strengthen a program. Let's say, for example, there is a sidewalk leading from a neighborhood to a school, but observations indicate it is seldom used. It might seem logical to start an encouragement campaign, but evaluation of the situation will call for finding out why families are not using the sidewalk. This information will help to shape your efforts. You may find out that there are concerns among parents regarding crime in the area. Your program might then try personal safety training for the children, or improved lighting, or enhanced police surveillance, or adult-supervised Walking School Buses – or all of the above. After taking action toward improvements, you will want to observe whether there is a change in sidewalk use. It may take trial and error or a combination of strategies to find out which ones lead to increased use of the sidewalk. This information is part of your evaluation, and through it, you will find out what works and what doesn't work. With this information, you can determine where and how to continue your efforts.

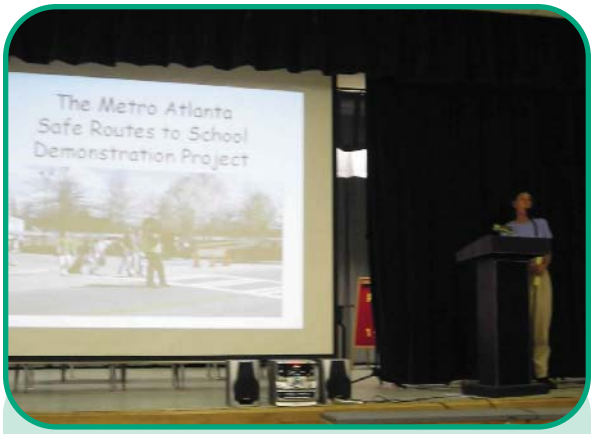
Evaluation also serves to build support for what you are doing. Evaluation results can help you to graphically define issues to the school community or the general public. Parents, for example, might be vaguely aware of speeding issues around a school. But when you provide specific documentation that, say, 50% of the morning traffic at an intersection is traveling 20 mph or more over the speed limit, they may be more supportive of your efforts to slow traffic down, even if it slows down their own commute to work.


Evaluation can shape and strengthen a program. Here a SRTS Team conducts an interview with a crossing guard to better understand the issues involved in walking to school.

Evaluation results can also help document and celebrate accomplishments, showing the school community and/or the general public that what you are doing is effective. A presentation at a PTA meeting documenting a 75% increase of daily walkers and bike-riders at your school (with accompanying photos of smiling children and full bike racks), for example, might generate excitement, enthusiasm, and even volunteer help to continue your Walking School Bus and Bike Train program. Providing evaluation results to the media can help to educate the general public on your issues, garnering awareness and support for SRTS efforts.

Evaluation also plays a critical role in funding a program. In order to obtain funds, you must

document a need and define your issues. Once you have funding, most funders require periodic documentation of your efforts – where did you start, what did you do, and what were the results? In order to continue your funding, you will need to show what you accomplished, why you seek additional monies, and what your intentions are; all of this is typically based on the evaluation information you obtained from your initial round of funded work. Your individual program evaluation results can also help with continued funding of SRTS programs across the nation; when SAFETEA-LU, the federal legislation funding SRTS, comes up for reauthorization, Congress will look at national evaluation data to see if programs are in fact bringing about the desired outcomes.




Presentations about a SRTS program's accomplishments can build support for your efforts.

## Formal Program Evaluation

Program Evaluation can be formal – intentionally built in to the activities through structured methods - or informal, with information gathered less precisely and in less structured ways. Both are useful, and can be complimentary. Sometimes, though, in the excitement of getting going, a SRTS Team can overlook the more formal aspects of evaluation; the Team may hold a wonderfully attended event and not have a method for counting the attendees, for example. For this reason, it is important to build a formal evaluation plan right into your SRTS Plan.

## SMART Objectives

Evaluation can flow naturally from well-written objectives in your SRTS Plan. The acronym SMART can help you to craft such objectives: Specific, Measurable, Achievable, Relevant, and Time-bound. How these apply to evaluation is explained in the example below.

Example SMART Objective: To increase by 50% over one school year the average number of daily walking and bicycling trips made to and from school by students and parents living within one mile of the school.

Specific – The objective should clearly identify what you want to see happen and who is your target audience. In the objective above, your SRTS Teams seeks to see an increase in "the average number of daily walking and bicycling trips to and from school." This means that in your evaluation you will be observing walking and bicycling, and you will count regular (non-event) walking and bicycling commutes to and from school.

In the example, your target audience is clearly defined: "students and parents living within one mile of the school." This does not mean that you won't welcome the participation of students and parents who live beyond one mile of the school; it simply means that when it comes time to measure your progress

### SMART Objectives

**S**pecific
**M**easurable
**A**chievable
**R**elevant
**T**ime-bound

(evaluate), you'll be looking at those families who live within a mile. It also means that you will count not only student trips, but parent trips as well.

Measurable – The objective should state how you will measure progress. Often this is stated in numbers, quite typically with percentages.

In the example, "To increase by 50%... the average number of daily walking and biking trips" indicates that, for your evaluation, you need to find a way to accurately count the number of student and parent walking and biking trips. To calculate a percentage increase, you will need to start with a count of trips at the beginning of the school year (your baseline data), and then you will compare that with a count you take at the end of the year.

Achievable – When you craft your objective, you are making a good guess about what you think you can achieve. The "what," "who," and "how much" of a change you think you might see should come from a realistic assessment of your school population. It should also take into account the resources you have to put into making that change happen. If the initial infrastructure challenges are so great that it is very difficult for families to walk or bike to school on a daily basis, then a 50% increase may not be realistic. In such a situation, an objective focused on measuring walking and biking on special event days may be more achievable.

Relevant – Your objectives should apply to the specific realities of your school community. The example above may not be relevant to a school community where great numbers of children do walk and bicycle but there are great concerns about the safety of their school journeys. It may be more relevant to such a school to develop objectives that focus on improving safety of walkers and bicycle-riders rather than increasing numbers.

### Common Pitfall!

Watch out for assumed "cause and effect" when writing an objective. Make sure you can really make a direct connection between your action and the results. It might be tempting to develop an objective such as "Increase numbers of walking trips to school by 30% by building sidewalks on major school routes." You may well see a 30% increase in walking trips to school, but can you really attribute the increase directly and only to building the sidewalks? In an SRTS program, there will likely be many variables, so it will be very difficult to determine a direct "cause and effect."

Time-bound – An objective should include a time-frame for completion. In the example, the objective states "over one school year." This means that data will be collected over the school year, likely at the very the beginning of the school year and at the very end. The data will be compared and evaluated to determine whether the objective was achieved in that specific timeframe.

As you develop objectives, it is important to keep your data collection methods in mind. Keep asking your Team "How are we going to evaluate that?" Thinking about how you will gather the data will help you to craft objectives that are truly specific, measurable, and time-bound.

### Data Collection

Your data collection methods follow from your objectives. They must give you the appropriate data you need. Sounds logical, but it takes some thinking. Let's use again the example SMART objective above: To increase by 50% over one school year the average number of daily walking and bicycling trips made to and from school by students and parents living within one mile of the

### Common SRTS Formal Data Collection Methods

- Traffic Counts
- Speed Surveys
- Participant Counts
- Information Distribution Counts
- Pre- and Post- Knowledge Tests
- Parent/ Student Surveys
- Documentation of completed tasks

school. Show of Hands surveys are very common tools for gathering walking and bicycling data. However, surveys conducted in classrooms will yield only information about student trips; asking young students about their parents' trips would likely be confusing and inaccurate, especially when there are multiple children in one family. In addition, these surveys generally do not yield information about afternoon trips (the surveys are typically conducted in the morning when the journey is fresh in mind for young children). Thus, your Team may need to be more creative and devise additional ways to collect the parent and student travel data.

You will need to consider a timeline for your data collection. Typically, you will collect baseline data before you implement any activities that could lead to a change. After the timeframe indicated in your objective, you will collect data again as a comparison; this is called "pre-" and "post-." However, you may very well want to collect some data at intervals between the "pre-" and "post-" to see how your efforts are progressing, and determine any changes to your strategies. Be sure to time your data collection to reflect the most accurate results; seasons, weather, time of day, day of the week, road construction or public events can all impact traffic-oriented activities. You probably wouldn't want to schedule a count of bicyclists in mid-January when roads may be icy or during the week that the fifth graders are on their graduation field trip.

Some objectives don't lend themselves to "pre-" and "post-" comparison but rather to straight documentation of whether something occurred or didn't. For the objective "Implement 75% of high priority infrastructure measures over two years," you would simply count up, from your Plan, the number of high priority infrastructure measures completed and determine whether these make up 75% of the total. Similarly, if your objective is to train all 4th and 5th graders in bicycle education, you might simply document that, yes, all 4th and 5th graders participated in a bicycle training through PE classes.

As you develop your plan for data collection, consider your resources. Do you have enough volunteers to do on-street traffic counts?

### Another Common Pitfall!

Be sure you can collect the data that you seek. For example, it may seem logical to connect a reduction in school-bound car traffic with an improvement in air quality, but how will you collect that data? You will need to determine if changes in air quality around your school could possibly be attributed to other factors – weather changes, industrial factors, or even regional or other local efforts to reduce traffic. Unless you have access to the required data, you may need to redefine your evaluation strategy. In general, keep your data-collecting methodology simple and easy to do.

Who will copy, distribute and collect surveys? Who will input survey data and into what kind of format? Do you have access to equipment that can collect speed data? Consider, too, the comfort level of the school with your evaluation efforts – how often can you comfortably ask teachers to conduct in-class surveys or pre- and post- tests, how often can you ask parents to fill out questionnaires and not be perceived as a nuisance? Be diligent, but keep in mind that SRTS is just one part of a busy school community.

### Evaluation in the SRTS Plan

As your Team writes its SRTS Plan, consider all of the above, and write down your methods and timeline for evaluation. The example ABC Elementary SRTS Plan in the Appendix includes a Methods of Evaluation section (see page a-22). Each objective on the Plan is listed with a corresponding data collection method and a timeline with estimated dates. Once you get busy with implementation, you will be very glad that you thought through your evaluation ahead of time! (Remember, though, that this plan is simply a guide, and can be modified as your program unfolds.)

### Informal Program Evaluation

Informal evaluation can also tell you a great deal about your program. Informal methods gather data that cannot be put into numbers or percentages, but reflect, with richness and depth, the impact of your program.

Simple observation can yield such data. Observations of school arrival and dismissal procedures, students crossing a street, a pedestrian education class, interactions between children and adults on a bike train, or any other aspect of your program can reveal program strengths, weaknesses, as well as changes over time. Anecdotes are a wonderful source of informal data. These are short stories about students, parents or any member of the school community illustrating how your program has impacted them.

### Involving Students in Evaluation

Safe Routes to School efforts are largely about the children, so consider ways to include them in the evaluation process. There are lots of ways to gather feedback from them; surveys, artwork, maps, essays and articles, interviews, or dramatic presentations can all help you to find out what students think about their journeys to school.

You can also engage students in analyzing and sharing your results. Older elementary and middle school students can do calculations and develop charts and graphs as a math activity or as a social science project. Some students may even be able to make school-wide or public presentations about the results, giving them opportunities to enhance their public speaking skills. Having children participate in typically adult arenas – such as a City Council meeting or a press conference — certainly draws attention!

Anecdotes can come from observations, interviews, comments on a survey, or just "through the grapevine." You might want to keep a notebook of anecdotes to use as real life examples in presentations, articles, or reports. Quotes are also an excellent source of informal data. Be on the lookout for these gems - just a few words poignantly encapsulating a sentiment, attitude change, or idea gleaned from the work of your program – and record them in a notebook as well.

Photos are rich sources of informal data. They can capture problems as well as accomplishments. Contrasting before and after pictures can tell a story in ways that words or numbers often cannot; a photo of an empty bike rack, for example, contrasted

with a photo of a sea of 50 bikes parked in multiple racks shows results!

### Sharing Program Results

Once you have collected your data, your SRTS Team will need it to review progress and make on-going decisions. It is also important to organize your data in meaningful ways so that the school community, the general public, and your funders can know what you have accomplished. Reports, presentations, maps, charts and graphs, newsletter articles, and photo displays are some of the ways you can share your results.

Often funders require periodic progress reports, and typically they require a final report at the end of the funding period. Reports can incorporate both formal and informal results, intermixing narrative explanations of what you have accomplished with tables or graphs that convey the numeric data you have gathered. Photos with captions can provide additional illustrations of your accomplishments.

Presentations are another way to share your results. Look for opportunities to share what you have done with both the school community and the broader community. A slide presentation mixing numeric data with lots of good photos is a very effective way to build

### Using Anecdotes, Interviews, and Quotes

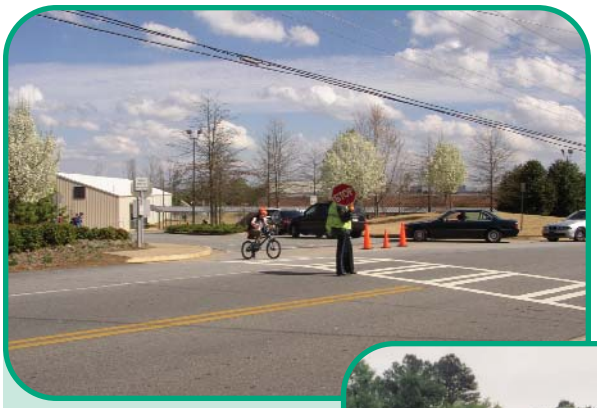
The following excerpt from a newsletter article shows how anecdotes, interviews and quotes can provide informal documentation of a SRTS program's impact.

#### Bicycles = Stress Relief – and Fun! - for Families in Duluth, Georgia

From *Shifting Times* newsletter

*Mornings used to be high stress in the Tafoya household. With work schedules to meet and two kids to get up and out to the bus early in the morning, Tammy Tafoya would find herself pretty stressed out on a daily basis. If the kids didn't make the bus, then the family faced sitting – and stressing - in the long line of cars that creeps down Bunten Road to get to Mason Elementary School. But since 11-year-old Scott started riding his bicycle to Mason every day, early morning life has improved tremendously for the Tafoya family. Scott gets to sleep in later, hops on his bike when he's ready, and still gets to school early! And, says his mom, he seems to come home in the afternoon happy after a bike ride and pleased that he has "beaten the bus."*

*Similar reports from other families are coming out of the Norman Downes neighborhood. Spurred by the Safe Routes to School project at Mason, Bernice Busch bikes the half-mile to school almost every day with her daughter, Lauren, while son, Brandon, rides ahead with his friend. Bernice says it's much quicker than driving, good for their health, and it "wakes the kids up in the morning." For Brandon it's about fun, and getting home faster in the afternoon means more playtime! Emma Lee Durham has also found that walking and biking to school are much easier than driving and it's great exercise for her and her daughter, Elizabeth; and Mary Beth Leima's son, Evan, a 3rd grader, loves the freedom that biking to school with his friends provides (he insists on biking, rain or shine!), and in the afternoon he gets home well before his younger sister and enjoys some one-on-one time with his mom.*



Before (above): A lone bike rider crosses the crosswalk in front of Mason Elementary.

After (right): A bike train of 35 crosses the same crosswalk during a Walk and Roll to School Day.

support for your efforts. Exhibits with photo displays are also venues for sharing some of your informal data.

Periodic school newsletter articles can communicate your results with the school community. Articles can present written "snapshots" of your program, including narratives, anecdotes, quotes, and perhaps photos. Copies of these articles may be included in reports.

You might also want to share your results with the local media. Press releases can contain a mixture of formal and informal data that can illustrate the issues your program seeks to address as well as your accomplishments.

### Process Evaluation

While your main focus will be on the content of your program, it is important to check in on your process as well. You might want to take stock periodically of how your SRTS Team processes are working by asking and answering some of the following:

- Are Team members able to fulfill their roles?
- Are Team members communicating effectively?
- Is the Team composition appropriate?
- Are meetings productive and satisfying?
- Are meeting times and locations convenient?
- Is the SRTS Team communicating with the school community effectively?
- Is the Team communicating with the broader community effectively?

These topics can be explored through group discussion, one-on-one interviews, or through written surveys. In the case of a paid staff person, it might be appropriate to have periodic formal staff evaluations.

Once your program gets established, it is

Members of the Mason Elementary SRTS Team celebrate themselves and their accomplishments.

important to evaluate with the future in mind. Ask and answer questions such as: Does the program have enough energy behind it to continue as it is? Is there a need to cut back or focus efforts in a particular way? Is there interest and energy enough to expand the program into new areas? Is there enough funding? If you build these evaluative questions into your process, major changes won't catch you by surprise, and your program will be ultimately more sustainable.

Finally, build appreciation and celebration into your evaluation. Find reasons to appreciate and celebrate the work of individuals, the work of your Team as a group, the changes you may see in the school community, and the joys of a community that supports walking and bicycling to and from school.

## Resources

- National Center for SRTS (http://www.saferoutesinfo.org) The website has links to parent surveys and other evaluation tools.
- GDOT's SRTS program (http://www.dot.ga.gov/localgovernment/Funding Programs /SRTS)
- Many public health departments and schools (colleges and universities) have experts in evaluation that may be willing to help you develop evaluation criteria and monitor your program's progress.

## Notes